

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
5 February 2004 (05.02.2004)

PCT

(10) International Publication Number
WO 2004/011362 A1

(51) International Patent Classification⁷: **B67D 1/08, A23L 1/025**

(21) International Application Number: **PCT/GB2003/003334**

(22) International Filing Date: **30 July 2003 (30.07.2003)**

(25) Filing Language: **English**

(26) Publication Language: **English**

(30) Priority Data:
0217768.1 31 July 2002 (31.07.2002) GB

(71) Applicant (*for all designated States except US*): **DIAGEO IRELAND [IE/IE]**; St. James Gate, Dublin 8 (IE).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **SMITH, Paul**

[GB/GB]; 42b Fore Street, Hertford, Hertfordshire CM23 5RG (GB). WALSHE, Justin [IE/GB]; Wychwood, Station Road, Minety, Malmesbury, Wiltshire SN16 9QY (GB).

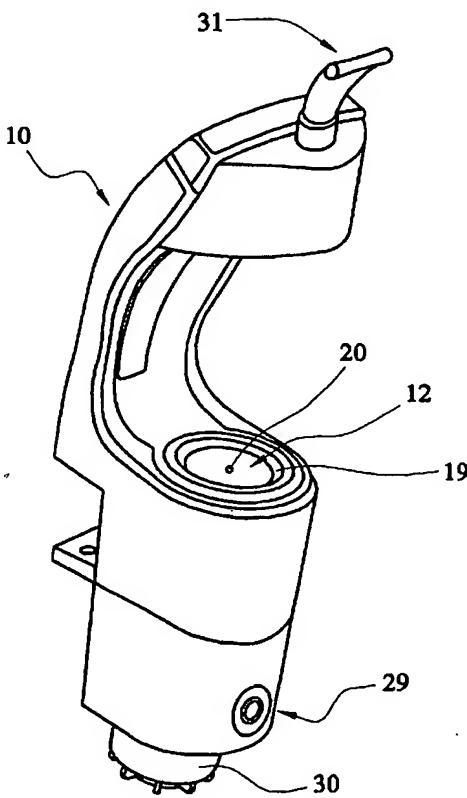
(74) Agent: **GREEN, Mark, Charles; Urquhart-Dykes & Lord, 30 Welbeck Street, London W1G 8ER (GB).**

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,

[Continued on next page]

(54) Title: **APPARATUS FOR FORMING A HEAD ON A BEVERAGE**



(57) **Abstract:** An apparatus for forming a head on a beverage using ultrasonic energy, the apparatus (10) including an hydrating means (20) such that a layer of water is provided to keep a platform (19), which is in turn coupled to an ultrasonic transducer, maintained in conductive contact with the, base (B) of a glass (G) of beverage. The water layer improves the transfer of ultrasonic energy to the beverage in the glass. Preferably the water layer is provided through a pump means coupled to a reservoir (30).